

forming at least one foam introduction hole through the outer surface of the piece into the cavity in the piece; and

introducing foam into the cavity in the piece through the foam introduction hole.

25

2. The method of claim 1, wherein a space between the top mating portion and the bottom mating portion filled by the adhesive is approximately between 1/8" and 3/4".

3. The method of claim 1, further comprising the step of  
30 forming at least one ventilation hole through the outer surface of the piece into the cavity in the piece before the step of introducing foam into the cavity in the piece through the foam introduction hole.

4. The method of claim 1, further comprising, after the  
35 step of applying a top skin coat and a bottom skin coat, the step applying reinforcements over the top skin coat and the bottom skin coat.

5. The method of claim 4, wherein the reinforcements comprise one of the group of phenolic and wood reinforcements.

40 6. The method of claim 1, wherein the adhesive is given time to cure before the step of introducing foam occurs.

7. The method of claim 1, further comprising the steps of:

removing air between the bottom gel coat and the bottom  
45 skin coat after the step of applying the bottom skin coat over

the bottom gel coat; and

removing air between the top gel coat and the top skin coat after the step of applying the top skin coat over the top gel coat;

50

8. The method of claim 7, wherein the step of removing air between the bottom gel coat and the bottom skin coat consists of applying vacuum to the bottom skin coat; and

the step of removing air between the top gel coat and the  
55 top skin coat consists of applying vacuum to the top skin coat.

9. The method of claim 7, further comprising, after removing the air between the bottom gel coat and the bottom skin coat and the air between the top gel coat and the top skin coat, the steps of:

60 checking the hardness of the of the bottom skin coat and the top skin coat; and

grinding out air trapped between the bottom skin coat and the bottom gel coat and the air between the top skin coat and the top gel coat after the top skin coat and the bottom skin  
65 coat harden.

10. The method of claim 1, further comprising the step of removing air trapped within the skin coat.

11. A vehicle hull made in accordance with method 1.

12. A vehicle hull made in accordance with method 7.

70 13. We claim a method for manufacturing at least partially

hollow vehicle hulls within a top mold and a bottom mold closed together, comprising the steps of:

placing a top hull layer having a top mating surface within a top mold;

75 placing a bottom hull layer having a bottom mating surface within a bottom mold;

placing a structural adhesive on at least one mating surface;

closing the top mold and the bottom mold together; and

80 allowing the structural adhesive to cure,  
whereby a structural bond is formed between the mating surfaces by the cured structural adhesive, whereby a unitary piece is formed within the closed molds.

14. A unitary vehicle hull, comprising:

85 a top hull layer having a top mating surface;

a bottom hull layer having a bottom mating surface;

a structural adhesive placed between the top mating surface and the bottom mating surface, whereby the structural adhesive forms a structural bond between the top hull layer and  
90 the bottom hull layer, whereby the structural bond increases the strength of the entire hull.

15. The hull of claim 14, wherein the structural bond diminishes a need for stringers within the hull.